

July 11, 2018

Illinois Environmental Protection Agency  
Bureau of Water  
Compliance Assurance Section, Mail Code #19  
1021 North Grand Avenue East  
Springfield, Illinois 62794-9276

Illinois Environmental Protection Agency  
DWPC Marion Region  
2309 West Main Street  
Marion, Illinois 62959

**Discharge Monitoring Report for June 2018  
(Permit No. 2015-EP-59681-1)  
Pump and Treat System  
Crab Orchard National Wildlife Refuge, Marion, Illinois**

Dear Sir or Madam:

AECOM, on behalf of the United States Fish and Wildlife Service (USFWS), is submitting the attached June 2018 Discharge Monitoring Report (DMR) for the subject treatment system located on the Crab Orchard National Wildlife Refuge (CONWR) in Marion, Illinois. This DMR has been prepared as required by the Permit to Construct, Own, and Operate (Permit No. 2015-EP-59681-1), dated April 28, 2017, for discharge to the City of Marion, IL publicly owned treatment works (POTW). Discharge of the treated effluent of the Pump and Treat System to the Marion POTW commenced on May 4, 2011. For the month of June 2018, the system was down from the beginning of the month until June 6, 2018 at 2:40 PM for a pump replacement. The system was also down from late in the day on June 24, 2018 until 2:00 PM on June 26, 2018 due to a power outage. The enclosed discharge summary was used to prepare the DMR.

Please contact Mr. Andy Day (314.429.0100) with any questions.

Sincerely,



Andy Day  
Environmental Scientist  
AECOM

**encl:** DMR  
Discharge Summary

**cc:** *(via electronic mail)*  
Viral Patel, USFWS  
Paul Lake, IEPA  
Mike Coffey, USFWS Project Coordinator  
Chuck Beasley, USFWS  
Brent Cain, City of Marion POTW

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different)

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)

Form Approved

OMB No. 2040-0004

NAME USFWS  
Crab Orchard National Wildlife  
Refuge  
ADDRESS 8588 Route 148  
Marion, IL 62599

## DISCHARGE MONITORING REPORT (DMR)


2015-EP-59681-1	to POTW
PERMIT NUMBER	DISCHARGE NUMBER

FACILITY Crab Orchard National Wildlife  
LOCATION Refuge Superfund Site

MONITORING PERIOD							
YEAR		MO	DAY	TO	YEAR	MO	DAY
FROM 2018		06	01		2018	06	30

NOTE: Read instructions before

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM	UNITS			
Flow, Total Daily Volume	SAMPLE	4,380	6,495	gpd					0	Daily	Cont
	PERMIT REQUIREMENT	7,200	14,400							Daily	Cont
Flow, Daily Average Rate	SAMPLE	3.2	4.5	gpm					0	Daily	Cont
	PERMIT REQUIREMENT	Report	Report							Daily	Cont
pH, Standard Units	SAMPLE				7.31		7.31	s.u.	0	1/mo	Grab
	PERMIT REQUIREMENT				5.5		9.5			1/mo	Grab
Polychlorinated Biphenyls, total	SAMPLE				<0.00044	<0.00044	<0.00044	mg/L	0	1/mo	Grab
	PERMIT REQUIREMENT						0.003			1/mo	Grab
	SAMPLE										
	PERMIT REQUIREMENT										
	SAMPLE										
	PERMIT REQUIREMENT										
	SAMPLE										
	PERMIT REQUIREMENT										

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER	I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.		TELEPHONE		DATE		
			314	802.1141	2018	07	11
TYPED OR PRINTED		SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	AREA	NUMBER	YEAR	MO	DAY

## COMMENT AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

Operated under the supervision of Andrew Day and Brooks Pfeiffer, Class K Operators - Crab Orchard Pump and Treat System

Crab Orchard National Wildlife Refuge  
Permanent Pump and Treat System  
Discharge Summary - June 2018  
AECOM Project Number: 60555096

June 2018	Flow (gpm)	Totalizer (gal)	Total Flow (gpd)	Effluent		Comments
				Total PCBs (mg/L)	pH (s.u.)	
06/01/18	0.44	11,310,434	580			Pump operated for brief period for troubleshooting - Pump failure.
06/02/18	0.00	11,311,014	-			Shutdown due to pump failure.
06/03/18	0.00	11,311,014	-			Shutdown due to pump failure.
06/04/18	0.00	11,311,014	-			Shutdown due to pump failure.
06/05/18	0.00	11,311,014	-			Shutdown due to pump failure.
06/06/18	4.30	11,311,014	3,141			Pump replaced and system restarted at 2:40 PM.
06/07/18	4.49	11,314,155	6,437			
06/08/18	4.50	11,320,592	6,495			
06/09/18	4.49	11,327,087	6,455			
06/10/18	4.40	11,333,542	6,348			
06/11/18	4.40	11,339,890	6,338			
06/12/18	4.40	11,346,228	6,323			
06/13/18	4.29	11,352,551	6,159	< 0.00044	7.31	
06/14/18	4.20	11,358,710	6,068			
06/15/18	4.20	11,364,778	6,061			
06/16/18	4.19	11,370,839	6,014			
06/17/18	4.18	11,376,853	6,000			
06/18/18	4.16	11,382,853	5,980			
06/19/18	4.09	11,388,833	5,871			
06/20/18	4.01	11,394,704	5,800			
06/21/18	4.01	11,400,504	5,805			
06/22/18	3.97	11,406,309	5,695			
06/23/18	3.58	11,412,004	5,130			
06/24/18	3.41	11,417,134	3,316			Shutdown due to power outage late in the day.
06/25/18	0.00	11,420,450	-			Shutdown due to power outage.
06/26/18	3.48	11,420,450	1,257			System restarted at 2:00 PM.
06/27/18	3.50	11,421,707	5,028			
06/28/18	3.50	11,426,735	5,030			
06/29/18	3.50	11,431,765	5,035			
06/30/18	3.50	11,436,800	5,030			
Data Summary	Flow (gpm)	Totalizer (gal)	Total Flow (gpd)	Effluent		Comments
				Total PCBs (mg/L)	pH (s.u.)	
Minimum	0.0	11,310,434	-	< 0.00044	7.31	
Average	3.2	11,367,699	4,380	< 0.00044	7.31	
Maximum	4.5	11,436,800	6,495	< 0.00044	7.31	

**Notes:**

gpm - gallons per minute  
gal - gallons  
gpd - gallons per day  
PCBs - polychlorinated biphenyls  
mg/L - milligrams per liter  
< - analyte not detected  
s.u. - standard units